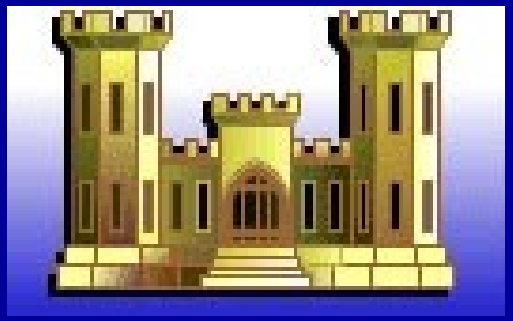
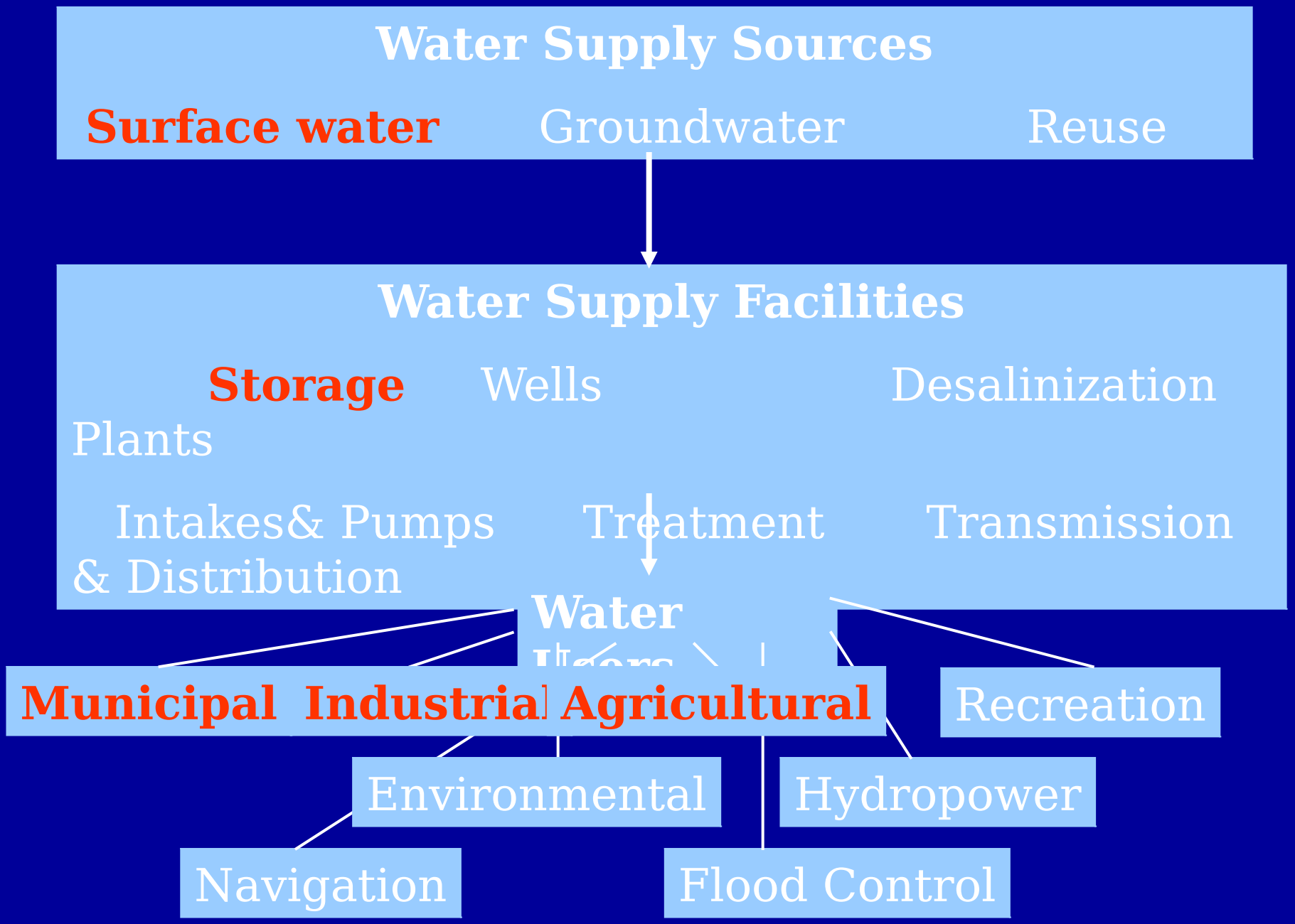


WATER SUPPLY

Authorities, Policies & Procedures

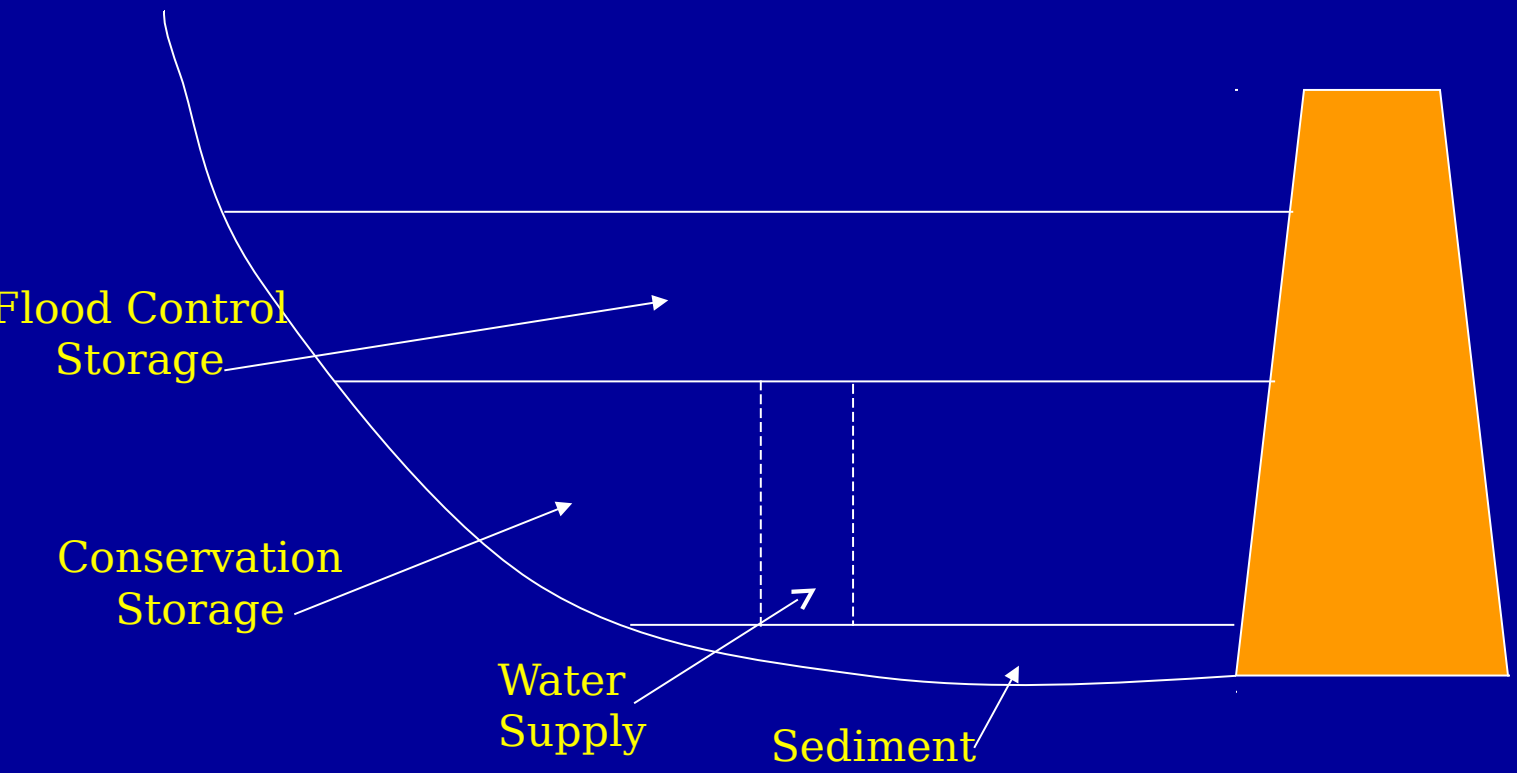
Steve Cone (CECW-PC)

SAD Water Supply Workshop
Wilmington, NC
4-6 November 2003



(Areas of primary Corps involvement in water su

Water Supply Share in a Multipurpose Project



WATER SUPPLY GUIDANCE

- ER 1105-2-100 PGN

www.usace.army.mil/inet/functions/cw/cecwp/pgncover

- EP 1165-2-1 Policy Digest

www.usace.army.mil/inet/functions/cw/cecwp/digest/index.

- IWR Report 96-PS-4 Water Supply Handbook

www.iwr.usace.army.mil/iwr/pdf/96ps4.pdf

- Steve Cone (CECW-PC)

WATER SUPPLY
National Policy

- **Title III, 1958 R&HA, "The 1958 Water Supply Act":**
  - **Section 301 (a): *"It is hereby declared to be the policy of the Congress to recognize the primary responsibilities of the States and local interests in developing water supplies for domestic, municipal,industrial and other purposes and that the Federal Government should participate and cooperate in developing such water supplies in connection with the construction, maintenance and operation of Federal navigation, flood control,irrigation or multiple purpose projects."***

WATER SUPPLY
National Policy

- **1952 Independent Offices Appropriation Act (31 USC 9701)**

  - It is the sense of the Congress that any work, service, publication, report, document, benefit, privilege, authority, use , franchise, license, permit, certificate, registration, or similar thing of value or utility performed, furnished, provided, granted, prepared, or issued by any Federal agency…to or for any person (including groups, associations, organizations, partnerships, corporations, or businesses)…shall be self-sustaining to the full extent possible, and the head of each Federal agency is authorized by regulation…to prescribe therefore, such fee, charge, or price…as he shall determine…to be fair and equitable taking into consideration direct and indirect cost to the Government, value to the recipient, public policy or interest served, and other pertinent facts, and any amount so determined or redetermined shall be collected and paid into the Treasury as miscellaneous receipts…

WATER SUPPLY
Primary Authorities

- Section 6 of the Flood Control Act of 1944
- Section 8 of the Flood Control Act of 1944
- The Water Supply Act of 1958

WATER SUPPLY
Secondary Authorities

- **War Dept. Civil Appropriations Act of 1938:**
  - **Sec Army can receive contributed funds for adding water supply to flood control reservoir projects**
- **PL 88-140, 1963:**
  - **Non-Federal sponsor has right to use of storage for the physical life of the project..**
- **Sec. 22 of WRDA 74:**
  - **Provide planning assistance to states,including the preparation of comprehensive plans for water resources development and conservation.**
- **Sec. 82 of WRDA 74 and 1974 Disaster Relief Act**
  - **Provide emergency supply of water and construct wells and transport water in drought areas**

WATER SUPPLY
Secondary Authorities

- **Sec. 103, WRDA of 1986:**
  - **Non-Federal cost sharing for M&I water supply = 100%**
  - **Non-Federal cost sharing for agricultural water supply = 35%**
- **Sec. 931, WRDA of 1986**
  - **Sec Army can allocate M&I water not under repayment agreement for interim irrigation.**
- **Sec. 932, WRDA of 1986**
  - **Modifies the 58 WSA for Corps projects but not Bureau Rec. projects.**

WATER SUPPLY
Secondary Authorities

- **Section 322 of WRDA 90: Provides for a reduced price of water for low income communities.**

- **Non-traditional Authorizations: - 66 provisions in since WRDA 86. Studies and projects authorized for planning, design & construction assistance in water quality/wastewater treatment, water supply and distribution systems, reuse systems, streamflow enhancement, drainage facilities and flooding.**

Cost Sharing Policies for M&I Storage

- Three Main Situations
  1. Pre-WRDA ’86
  2. Reallocations/Project Modifications
  3. Post WRDA ’86

- All revenue received goes to U.S. Treasury

Cost Sharing Policies for M&I Storage

Pre-WRDA ’86 Projects

- Non-Federal sponsor pays 100% of investment cost with interest
- 1st 10-years interest free
- Interest based on year the project went under construction.
- 30-year repayment from plant-in-service date
- Pro-rata share of OMRR&R costs
- All conveyance, treatment, and distribution; Non-Federal

Cost Sharing Policies for M&I Storage

Reallocations and Project Modifications

- Non-Federal sponsor pays 100% of new construction costs during construction
- If storage reallocated, sponsor repays over 30-years with interest
- Interest rate as established in Section 932 of WRDA ’86
- Pro-rata share of OMRR&R costs
- All conveyance, treatment, and distribution; Non-Federal

Cost Sharing Policies for M&I Storage

Post WRDA ’86 Projects

- Non-Federal sponsor pays 100% of new construction costs during construction*
- Pro-rata share of OMRR&R costs
- All conveyance, treatment, and distribution; Non-Federal

* This is policy, law permits repayment over 30-years with interest at WRDA ’86 rate

WATER SUPPLY
Additional Policies

- Reallocations at Existing Projects
  - Higher of updated costs, revenues forgone, benefits forgone, or replacement costs
  - Limit to users most likely alternative
  - User acquires a permanent right to storage

- Surplus Water
  - Interim Use (normally 5-years)
  - Annual price same as reallocation and includes a pro-rata share of OMRR&R

WATER SUPPLY
Additional Policies

Addition of Water Supply Storage and Seasonal Operations

- Use “WILLINGNESS TO PAY” Concepts.
- Non-Federal Share is 100% of costs of all modifications/construction, payment of losses to others, plus ½ of “net benefits”
- Upper Limits on non-Fed costs

WATER SUPPLY
Additional Policies

Section 221 and M&I Agreements

- Non-Federal parties to water storage agreements must meet the requirements of Section 221 of the 1970 FCA, as amended, where costs are incurred for new construction activity. Under Section 221, such parties must be a “legally constituted public body.”
- The requirements of Section 221 do not apply to sales of storage originally included at projects where construction commenced before 1 January 1972 or where new construction activity is not required. In these cases, all non-Federal interests (public or private) are eligible.

Cost Analysis of Reallocated Storage

1. **Benefits Foregone**

   - based on the cost of the most likely alternative source of power (sum of capacity and energy)

   - generally estimated using standard Corps NED evaluation criteria

   - estimated for the remaining economic life of project or 50 years which ever is greater

Cost Analysis of Reallocated Storage

2. Revenues Foregone

- from hydropower – reduction in revenues accruing to the Treasury as a result of the reallocation

- based on existing rates charged by the PMA

- from other project purposes – reduction in revenues accruing to the Treasury based on any existing repayment agreements.

Cost Analysis of Reallocated Storage

3. Replacement Costs

- considered equal to the benefits foregone; calculated by P&G procedures for hydropower benefits evaluation.

- if existing contracts with customers exist, estimated as PMA's cost of obtaining power from least costly alternative for duration of the contracts.

- when contracts expire the remaining period of analysis should be equal to benefits foregone

Cost Analysis of Reallocated Storage

4. Updated Cost of Storage

$$(TC - SP) \times \frac{\text{Storage reallocated (ac-ft)}}{\text{Total usable storage space (ac-ft)}}$$

TC = total cost of construction updated using Civil Works Construction Costs Index System (CWCCIS) and ENR Construction Cost Index

SP = specific costs (costs of identifiable project features for a specific purpose updated using CWCCIS and ENR

Note: TUS excludes sediment and power head storage

REALLOCATION
Hydropower Credit

Where Federal Hydropower is affected:

-if hydropower revenues are reduced, the Power Marketing Agency (PMA) will be credited for the amount of revenues foregone to the Treasury

- where existing PMA contracts require acquisition of replacement power, additional credit covering cost can be made to PMA for duration of contracts

WATER SUPPLY
Additional Policies
Irrigation

- Western States
  - Bureau of Reclamation
  - Corps of Engineers
- Outside Western States